

WHAT IS CLAIMED IS:

1. A computer-implemented system for searching for a desired item, comprising:

a database comprising information associated with items for which a search
5 may be performed; and

a server system associated with one or more software components collectively operable to:

in response to user input specifying an alphanumeric string associated with a desired item, search the database for an alphanumeric string that matches the
10 user-specified alphanumeric string to determine item names and item descriptions for all matching items corresponding to the matching alphanumeric string;

provide the determined item names and item descriptions for the matching items for display to the user;

in response to user input indicating a desire to view attribute values for
15 attributes of the particular matching item, determine attribute names and attribute values for attributes of the particular matching item; and

provide the determined attribute names and attribute values for the particular matching item for display to the user.

20 2. The system of Claim 1, wherein:

the database comprises:

a first table comprising rows each corresponding to a keyword and each comprising an identifier uniquely identifying the keyword and a name for the keyword, each keyword corresponding to one or more items; and

25 a second table comprising rows each corresponding to an item and each comprising a name for the item, a description for the item, and the identifier for the keyword corresponding to the item;

the user-specified alphanumeric string comprises at least some of a keyword;
and

30 the software components are operable to:

2025 RELEASE UNDER E.O. 14176

search the keyword names in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more keyword identifiers corresponding to the one or more matching alphanumeric strings; and

in response to determining the one or more keyword identifiers, search
5 the fourth table for the one or more determined keyword identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

3. The system of Claim 2, wherein:
10 each row of the second table comprises an identifier uniquely identifying the corresponding item;
the database further comprises:

a third table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and
15 a name of the attribute; and

a fourth table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the software components are operable to:
20 search the fourth table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

in response to determining the attribute identifiers, search the third table for the determined attribute identifiers to determine the attribute names for the
25 attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

4. The system of Claim 1, wherein:
the database comprises a first table comprising rows each corresponding to an
30 item and each comprising an identifier uniquely identifying the item, a name for the item, and a description for the item;

the user-specified alphanumeric string comprises at least some of an item name or an item description; and

the software components are operable to search the item names and item descriptions in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more item identifiers corresponding to the one or more matching alphanumeric strings, the item names and item descriptions containing the matching alphanumeric strings being provided for display.

5. The system of Claim 4, wherein:

the database further comprises:

a second table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name of the attribute; and

a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the software components are operable to:

search the third table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

in response to determining the attribute identifiers, search the second table for the determined attribute identifiers to determine the attribute names for the attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

6. The system of Claim 1, wherein:

the database comprises:

a first table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name for the attribute;

a second table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a description for the item; and

5 a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item;

the user-specified alphanumeric string comprises at least some of an attribute name; and

the software components are operable to:

10 search the attribute names in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more attribute identifiers corresponding to the one or more matching alphanumeric strings;

in response to determining the one or more attribute identifiers, search the third table for the one or more determined attribute identifiers to determine the one
15 or more item identifiers for the corresponding attributes; and

in response to determining the one or more item identifiers, search the second table for the one or more determined item identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

20

7. The system of Claim 6, wherein the software components are further operable to, in response to determining the one or more attribute identifiers, search the third table for the one or more determined attribute identifiers to determine the attribute values for the corresponding attributes, the attribute names containing the
25 matching alphanumeric strings and the determined attribute values being provided for display.

105842.01302
20250724

8. The system of Claim 1, wherein:

the database comprises:

a first table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a description for the item; and

a second table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value and the identifier for the item;

the user-specified alphanumeric string comprises at least some of an attribute value; and

the software components are operable to:

search the attribute values in the second table for alphanumeric strings matching the user-specified alphanumeric string to determine the one or more item identifiers corresponding to the one or more matching alphanumeric strings;

in response to determining the one or more item identifiers, search the first table for the one or more determined item identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

9. The system of Claim 8, wherein:

the database comprises a third table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name for the attribute;

each row of the second table comprises the identifier for the corresponding attribute; and

the software components are operable to:

by searching the attribute values in the second table, determine the one or more attribute identifiers corresponding to the one or more matching alphanumeric strings; and

in response to determining the one or more attribute identifiers, search the third table for the one or more determined attribute identifiers to determine the

attribute names for the corresponding attributes, the determined attribute names and the attribute values names containing the matching alphanumeric strings being provided for display.

5 10. The system of Claim 1, wherein the software components are operable to search one or more item catalogs to determine the matching items independent of any user input specifying a particular catalog associated with the desired item.

10 11. The system of Claim 1, wherein:
the database comprises an internal item catalog for an enterprise associated with the user;

the user input specifying the alphanumeric string is received in response to user selection of a global search module from among a plurality of available search modules; and

15 the software components are operable to search one or more external item catalogs associated with one or more other enterprises in addition to the internal item catalog in response to the user selection of the global search module and the user input specifying the alphanumeric string.

20 12. The system of Claim 1, wherein the system allows the user to view the item name, item description, attributes, and attribute values for at least the particular matching item within a single display.

13. A computer-implemented method for searching for a desired item, comprising:

in response to user input specifying an alphanumeric string associated with a desired item, searching a database that comprises information associated with items for an alphanumeric string that matches the user-specified alphanumeric string to determine item names and item descriptions for all matching items corresponding to the matching alphanumeric string;

providing the determined item names and item descriptions for the matching items for display to the user;

in response to user input indicating a desire to view attribute values for attributes of the particular matching item, determining attribute names and attribute values for attributes of the particular matching item; and

providing the determined attribute names and attribute values for the particular matching item for display to the user.

14. The method of Claim 13, wherein:

the database comprises:

a first table comprising rows each corresponding to a keyword and each comprising an identifier uniquely identifying the keyword and a name for the keyword, each keyword corresponding to one or more items; and

a second table comprising rows each corresponding to an item and each comprising a name for the item, a description for the item, and the identifier for the keyword corresponding to the item;

the user-specified alphanumeric string comprises at least some of a keyword;

and

the method further comprises:

searching the keyword names in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more keyword identifiers corresponding to the one or more matching alphanumeric strings; and

in response to determining the one or more keyword identifiers, searching the second table for the one or more determined keyword identifiers to

determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

15. The method of Claim 14, wherein:

5 each row of the second table comprises an identifier uniquely identifying the corresponding item;

the database further comprises:

10 a third table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name of the attribute; and

a fourth table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the method further comprises:

15 searching the fourth table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

20 in response to determining the attribute identifiers, searching the third table for the determined attribute identifiers to determine the attribute names for the attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

16. The method of Claim 13, wherein:

25 the database comprises a first table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, and a description for the item;

the user-specified alphanumeric string comprises at least some of an item name or an item description; and

30 the method further comprises searching the item names and item descriptions in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more item identifiers corresponding to the one or more

matching alphanumeric strings, the item names and item descriptions containing the matching alphanumeric strings being provided for display.

17. The method of Claim 16, wherein:

5 the database further comprises:

a second table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name of the attribute; and

10 a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the method further comprises:

15 searching the third table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

in response to determining the attribute identifiers, searching the second table for the determined attribute identifiers to determine the attribute names for the attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

20

18. The method of Claim 13, wherein:

the database comprises:

25 a first table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name for the attribute;

a second table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a description for the item; and

30 a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item;

203440 2792501

the user-specified alphanumeric string comprises at least some of an attribute name; and

the method further comprises:

searching the attribute names in the first table for alphanumeric strings
5 matching the user-specified alphanumeric string to determine one or more attribute identifiers corresponding to the one or more matching alphanumeric strings;

in response to determining the one or more attribute identifiers,
searching the third table for the one or more determined attribute identifiers to determine the one or more item identifiers for the corresponding attributes; and

10 in response to determining the one or more item identifiers, searching the second table for the one or more determined item identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

15 19. The method of Claim 18, further comprising, in response to determining the one or more attribute identifiers, searching the third table for the one or more determined attribute identifiers to determine the attribute values for the corresponding attributes, the attribute names containing the matching alphanumeric strings and the determined attribute values being provided for display.

20 20. The method of Claim 13, wherein:

the database comprises:

a first table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a
25 description for the item; and

a second table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value and the identifier for the item;

the user-specified alphanumeric string comprises at least some of an attribute
30 value; and

the method further comprises:

searching the attribute values in the second table for alphanumeric strings matching the user-specified alphanumeric string to determine the one or more item identifiers corresponding to the one or more matching alphanumeric strings;

in response to determining the one or more item identifiers, searching
5 the first table for the one or more determined item identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

21. The method of Claim 20, wherein:

10 the database comprises a third table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name for the attribute;

each row of the second table comprises the identifier for the corresponding attribute; and

15 the method further comprises:

by searching the attribute values in the second table, determining the one or more attribute identifiers corresponding to the one or more matching alphanumeric strings; and

in response to determining the one or more attribute identifiers,
20 searching the third table for the one or more determined attribute identifiers to determine the attribute names for the corresponding attributes, the determined attribute names and the attribute values names containing the matching alphanumeric strings being provided for display.

25 22. The method of Claim 13, further comprising searching one or more item catalogs to determine the matching items independent of any user input specifying a particular catalog associated with the desired item.

23. The method of Claim 13, wherein:

30 the database comprises an internal item catalog for an enterprise associated with the user;

the user input specifying the alphanumeric string is received in response to user selection of a global search module from among a plurality of available search modules; and

5 the method further comprises searching one or more external item catalogs associated with one or more other enterprises in addition to the internal item catalog in response to the user selection of the global search module and the user input specifying the alphanumeric string.

24. The method of Claim 13, further comprising allowing the user to view
10 the item name, item description, attributes, and attribute values for at least the particular matching item within a single display.

2025-04-24 10:00:00

25. Software for searching for a desired item, the software being embodied in computer-readable media and when executed operable to:

in response to user input specifying an alphanumeric string associated with a desired item, search a database that comprises information associated with items for an alphanumeric string that matches the user-specified alphanumeric string to determine item names and item descriptions for all matching items corresponding to the matching alphanumeric string;

provide the determined item names and item descriptions for the matching items for display to the user;

in response to user input indicating a desire to view attribute values for attributes of the particular matching item, determine attribute names and attribute values for attributes of the particular matching item; and

provide the determined attribute names and attribute values for the particular matching item for display to the user.

26. The software of Claim 25, wherein:
the database comprises:

a first table comprising rows each corresponding to a keyword and each comprising an identifier uniquely identifying the keyword and a name for the keyword, each keyword corresponding to one or more items; and

a second table comprising rows each corresponding to an item and each comprising a name for the item, a description for the item, and the identifier for the keyword corresponding to the item;

the user-specified alphanumeric string comprises at least some of a keyword;

and

the software is operable to:

search the keyword names in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more keyword identifiers corresponding to the one or more matching alphanumeric strings; and

in response to determining the one or more keyword identifiers, search the fourth table for the one or more determined keyword identifiers to determine the

item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

27. The software of Claim 26, wherein:

5 each row of the second table comprises an identifier uniquely identifying the corresponding item;

the database further comprises:

10 a third table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name of the attribute; and

a fourth table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the software is operable to:

15 search the fourth table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

20 in response to determining the attribute identifiers, search the third table for the determined attribute identifiers to determine the attribute names for the attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

28. The software of Claim 25, wherein:

25 the database comprises a first table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, and a description for the item;

the user-specified alphanumeric string comprises at least some of an item name or an item description; and

30 the software is operable to search the item names and item descriptions in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more item identifiers corresponding to the one or more matching

105343-0130
20210325001

alphanumeric strings, the item names and item descriptions containing the matching alphanumeric strings being provided for display.

29. The software of Claim 28, wherein:

5 the database further comprises:

a second table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name of the attribute; and

10 a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item; and

the software is operable to:

15 search the third table for all instances of the item identifier for the particular matching item to determine the attribute identifiers and attribute values for attributes of the particular matching item; and

in response to determining the attribute identifiers, search the second table for the determined attribute identifiers to determine the attribute names for the attributes of the particular matching item, the determined attribute names and attribute values being provided for display.

20

30. The software of Claim 25, wherein:

the database comprises:

25 a first table comprising rows each corresponding to an attribute of one or more items and each comprising an identifier uniquely identifying the attribute and a name for the attribute;

a second table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a description for the item; and

30 a third table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value, the identifier for the attribute, and the identifier for the item;

2025-04-23 10:43:00

the user-specified alphanumeric string comprises at least some of an attribute name; and

the software is operable to:

5 search the attribute names in the first table for alphanumeric strings matching the user-specified alphanumeric string to determine one or more attribute identifiers corresponding to the one or more matching alphanumeric strings;

in response to determining the one or more attribute identifiers, search the third table for the one or more determined attribute identifiers to determine the one or more item identifiers for the corresponding attributes; and

10 in response to determining the one or more item identifiers, search the second table for the one or more determined item identifiers to determine the item names and item descriptions for the matching items, the determined item names and item descriptions being provided for display.

15 31. The software of Claim 30, further operable to, in response to determining the one or more attribute identifiers, search the third table for the one or more determined attribute identifiers to determine the attribute values for the corresponding attributes, the attribute names containing the matching alphanumeric strings and the determined attribute values being provided for display.

20

32. The software of Claim 25, wherein:
the database comprises:

25 a first table comprising rows each corresponding to an item and each comprising an identifier uniquely identifying the item, a name for the item, a description for the item; and

a second table comprising rows each corresponding to an attribute value of an attribute of an item and each comprising the attribute value and the identifier for the item;

30 the user-specified alphanumeric string comprises at least some of an attribute value; and

the software is operable to:

in response to determining the one or more item identifiers, search the
5 first table for the one or more determined item identifiers to determine the item names
and item descriptions for the matching items, the determined item names and item
descriptions being provided for display.

each row of the second table comprises the identifier for the corresponding attribute; and

in response to determining the one or more attribute identifiers, search
20 the third table for the one or more determined attribute identifiers to determine the
attribute names for the corresponding attributes, the determined attribute names and
the attribute values names containing the matching alphanumeric strings being
provided for display.

35. The software of Claim 25, wherein:

30 the database comprises an internal item catalog for an enterprise associated with the user;

the user input specifying the alphanumeric string is received in response to user selection of a global search module from among a plurality of available search modules; and

the software is operable to search one or more external item catalogs
5 associated with one or more other enterprises in addition to the internal item catalog in response to the user selection of the global search module and the user input specifying the alphanumeric string.

36. The software of Claim 25, wherein the system allows the user to view
10 the item name, item description, attributes, and attribute values for at least the particular matching item within a single display.

2025-01-10 10:10:10

37. A computer-implemented system for searching for a desired item, comprising:

means for storing information associated with items for which a search may be performed;

5 means for, in response to user input specifying an alphanumeric string associated with a desired item, searching the database for an alphanumeric string that matches the user-specified alphanumeric string to determine item names and item descriptions for all matching items corresponding to the matching alphanumeric string;

10 means for providing the determined item names and item descriptions for the matching items for display to the user;

means for, in response to user input indicating a desire to view attribute values for attributes of the particular matching item, determining attribute names and attribute values for attributes of the particular matching item; and

15 means for providing the determined attribute names and attribute values for the particular matching item for display to the user.

1052649.01182